

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number  
**WO 2005/055968 A1**

(51) International Patent Classification<sup>7</sup>: **A61K 7/42**

(21) International Application Number:  
PCT/GB2004/005145

(22) International Filing Date:  
10 December 2004 (10.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0328693.7 11 December 2003 (11.12.2003) GB

(71) Applicants (for all designated States except US): **IMPERIAL CHEMICAL INDUSTRIES PLC** [GB/GB]; 20 Manchester Square, London W1U 3AN (GB). **ICI AMERICAS INC** [US/US]; 10 Finderne Avenue, Bridgewater NJ 08807 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KESSELL, Lorna, Margaret** [GB/GB]; 7 Saigdale Road, Swainby, Northallerton, North Yorkshire DL6 3DP (GB). **LYTH, Philip, Laurence** [GB/GB]; 6 Neath Court, Ingleby Barwick, Stockton On Tees, Cleveland TS17 5DN (GB). **GORMLEY, John, L.** [US/US]; 52 Hillside Avenue, Midland Park, NJ 07432 (US).

(74) Agents: **HUMPHRIES, Martyn** et al.; Uniqema Limited, Intellectual Property Department, Wilton Centre, Wilton, Redcar, Cleveland TS10 4RF (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METAL OXIDE DISPERSIONS

(57) Abstract: A dispersion contains particles of metal oxide dispersed in a siloxane fluid and a dispersing agent which is a polysiloxane wherein (i) the polysiloxane contains in the range from 0.1 to 3 carboxyl groups, and (ii) the ratio of non-carboxyl group containing monomer units to carboxyl group containing monomer units in the polysiloxane is in the range from 40 to 150:1. The dispersion is particularly suitable for use as an ingredient in sunscreening cosmetics.



WO 2005/055968 A1